

# MONTHLY WEATHER REVIEW,

## APRIL, 1877.

WAR DEPARTMENT,

Office of the Chief Signal Officer,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

### INTRODUCTION.

The present REVIEW for the month of April depends upon all data received up to the 15th of May from the Canadian Meteorological Service, the United States Signal Service and Voluntary Observers, the Army Post Surgeons and United States Navy. The most noticeable features recorded during the month are: the very severe storms off the Carolina coast from the 5th to the 14th; the general high temperature throughout the country; the excess of rain-fall in the South Atlantic States and Tennessee; the destructive hail-storms and tornadoes; the aurora of the 14th, visible from Dakota to Maine; the partial destruction of the grasshoppers west of the Mississippi by cold weather and snow, showing that the eastward migrations of these insects is probably limited by the vicissitudes of the climate of the Mississippi valley, whereby they are principally confined to the high, warm and dry plains that are not frequently visited by late cold weather and snows.

### BAROMETRIC PRESSURE.

*In General.*—The general distribution of atmospheric pressure is shown by the isobars upon chart No. II, from which we see mean pressures of 30.00 or more reported from southern Florida, and from all Canadian stations. The area of lowest mean, 29.85 or less, extends from northern Texas to Nebraska. On the Pacific coast, 30.13 is reported from Portland, Or., and 30.01 from San Diego and San Francisco. Mean pressures east of the Rocky Mountains are from 0.05 to 0.20 less than during the cold months of April, 1874 and 1875, except in New Brunswick and Nova Scotia. In April, 1876, much higher pressures prevailed in the Southern States, and no marked area of high pressure appeared to exist north of the St. Lawrence and the Lakes.

*Barometric Range.*—The general range of the barometer over the whole country east of the Rocky Mountains was about 1.50 inches, as may be seen from the following table, which gives the maximum and minimum pressures that occur on the tri-daily maps, (7:35 a. m., 4:35 p. m. and 11 p. m., Washington time,) near the centres of the respective areas of high and low barometer:

AREA.	DATE.	LOW AREAS.	DATE.	HIGH AREAS.
No.		MINIMUM BAROM.		MAXIMUM BAROM.
I.	April 1st	29.28	April 1st	30.60
II.	" 5th	29.59	" 2d	30.57
III.	" 6th	29.26	" 8th	30.20
IV.	" 5th	29.70	" 9th	30.39
V.	" 8th	29.18	" 17th	30.24
VI.	" 18th	29.80	" 22d	30.45
VII.	" 18th	29.11	" 24th	30.37
VIII.	" 22d	29.70	" 30th	30.22
IX.	" 28th	29.40	.....	.....

The greatest local barometric ranges have been as follows: 1.37 in. at Leavenworth; 1.30 at Eastport; 1.27 at Duluth; 1.26 at Keokuk; 1.22 at Omaha; 1.21 at Yankton. The least local ranges have been: 0.39 at Pike's Peak; 0.72 at Cheyenne and Indianola, and 0.75 at Galveston.